CLAIMS

1. A pyrrolopyrimidine or pyrrolotriazine derivative substituted with a carbamoyl group represented by the following formula [I]:

$$R^{1}$$
 $CONH_{2}$ R^{2} R^{2} R^{3} R^{2} R^{3}

(wherein E is N or CR¹⁰;

 R^{1} is $-OR^{4}$, $-S(O)_{1}R^{4}$ or $-NR^{4}R^{5}$;

R² is hydrogen, C₁₋₆alkyl, C₃₋₇cycloalkyl, C₃₋₇cycloalkyl-C₁₋₆alkyl, halogen, C₁₋₆alkoxy, C₃₋₇cycloalkyloxy, C₁₋₆alkylthio or -N(R⁶)R⁷;

R³ is hydrogen, C₁₋₆alkyl, C₃₋₇cycloalkyl, C₃₋₇cycloalkyl-C₁₋₆alkyl or aryl;

R⁴ and R⁵ are the same or different, and independently hydrogen, C₁₋₉alkyl, C₃₋₇cycloalkyl, C₃₋₇cycloalkyl-C₁₋₆alkyl, di(C₃₋₇cycloalkyl)-C₁₋₆alkyl, C₁₋₆alkoxy-C₁₋₆alkyl, di(C₁₋₆alkoxy)-C₁₋₆alkyl, hydroxy-C₁₋₆alkyl, cyano-C₁₋₆alkyl, carbamoyl-C₁₋₆alkyl or di(C₁₋₆alkyl)amino-C₂₋₆alkyl; or R⁴ and R⁵ are taken together to form - (CH₂)_m-A-(CH₂)_n- wherein A is methylene, oxygen, sulfur, NR⁸ or CHR⁹;

 R^6 and R^7 are the same or different, and independently hydrogen or C_{1} . 6alkyl;

R⁸ is hydrogen, C₁₋₆alkyl, C₃₋₇cycloalkyl, aryl or aryl-C₁₋₆alkyl;

R⁹ is hydrogen, hydroxy, hydroxy-C₁₋₆alkyl, cyano or cyano-C₁₋₆alkyl;

R¹⁰ is hydrogen, halogen or C₁₋₆alkyl;

l is an interger selected from 0, 1 and 2;

m is an integer selected from 1, 2, 3 and 4;

n is an integer selected from 0, 1, 2 and 3;

with the proviso, when A is oxygen, sulfur or NR⁸, then n is 1, 2 or 3;

Ar is aryl or heteroaryl which aryl or heteroaryl is unsubstituted or substituted with 1 or more substituents, which are the same or different, selected from the group consisting of halogen, C₁₋₆alkyl, C₃₋₇cycloalkyl, C₂₋₆alkenyl, C₂₋₆alkenyl, C₂₋₆alkynyl, C₁₋₆alkylylthio, C₁₋₆alkylsulfinyl, C₁₋₆alkylsulfonyl, cyano, nitro, hydroxy, -CO₂R¹¹, -C(=O)R¹², -CONR¹³R¹⁴, -OC(=O)R¹⁵, -NR¹⁶CO₂R¹⁷, -S(=O)_rNR¹⁸R¹⁹, trifluoromethyl, trifluoromethoxy, difluoromethoxy, fluoromethoxy

and $-N(R^{20})R^{21}$;

R¹¹ and R¹⁷ are the same or different, and independently are hydrogen, C₁₋₅alkyl, C₃₋₈cycloalkyl, C₃₋₈cycloalkyl-C₁₋₅alkyl, aryl or aryl-C₁₋₅alkyl;

 R^{12} , R^{13} , R^{14} , R^{15} , R^{16} , R^{18} , R^{19} , R^{20} and R^{21} are the same or different, and independently are hydrogen, C_{1-5} alkyl or C_{3-8} cycloalkyl;

r is 1 or 2), individual isomers thereof or racemic or non-racemic mixtures of isomers thereof, or pharmaceutically acceptable salts and hydrates thereof.

2. The pyrrolopyrimidine derivative substituted with a carbamoyl group according to claim 1 represented by the following formula [II]:

$$R^{1}$$
 $CONH_{2}$ R^{2} R^{3} R^{2} R^{3}

(wherein R¹, R², R³ and Ar are as defined in claim 1), individual isomers thereof or racemic or non-racemic mixtures of isomers thereof, or pharmaceutically acceptable salts and hydrates thereof.

- 3. The pyrrolopyrimidine derivative substituted with a carbamoyl group according to claim 2 represented by the formula [II], wherein R¹ is -OR⁴ or -NR⁴R⁵; R² is C₁₋₆alkyl; R³ is hydrogen or C₁₋₆alkyl; R⁴ and R⁵ are the same or different, and independently hydrogen, C₁₋₉alkyl, C₃₋₇cycloalkyl, C₃₋₇cycloalkyl-C₁₋₆alkyl, di(C₃₋₇cycloalkyl)-C₁₋₆alkyl, C₁₋₆alkoxy-C₁₋₆alkyl, di(C₁₋₆alkoxy)-C₁₋₆alkyl, hydroxy-C₁₋₆alkyl or cyano-C₁₋₆alkyl; Ar is phenyl which phenyl is substituted with two or three substituents, which are the same or different, selected from the group consisting of halogen, C₁₋₃alkyl, C₁₋₃alkoxy, C₁₋₃alkylthio, trifluoromethyl, trifluoromethoxy and N(R²⁰)R²¹ (wherein R²⁰ and R²¹ are the same or different, and independently are hydrogen or C₁₋₃alkyl), individual isomers thereof or racemic or non-racemic mixtures of isomers thereof, or pharmaceutically acceptable salts and hydrates thereof.
- 4. The pyrrolopyrimidine derivative substituted with a carbamoyl group

according to claim 2 represented by the formula [II], wherein R¹ is -OR⁴ or -NR⁴R⁵; R² is C₁₋₆alkyl; R³ is hydrogen or C₁₋₆alkyl; R⁴ is C₁₋₉alkyl, C₃₋₇cycloalkyl, C₃₋₇cycloalkyl, C₁₋₆alkyl, di(C₁₋₆alkyl, di(C₁₋₆alkyl, di(C₁₋₆alkyl, hydroxy-C₁₋₆alkyl) or cyano-C₁₋₆alkyl; R⁵ is hydrogen; Ar is phenyl which phenyl is substituted with two or three substituents, which are the same or different, selected from the group consisting of halogen and C₁₋₃alkyl, individual isomers thereof or racemic or non-racemic mixtures of isomers thereof, or pharmaceutically acceptable salts and hydrates thereof.

5. The pyrrolotriazine derivative substituted with a carbamoyl group according to claim 1 represented by the following formula [III]:

$$R^{2}$$
 N
 N
 N
 R^{3}
 R^{2}
 R^{3}
 R^{2}
 R^{3}

(wherein R¹, R², R³ and Ar are as defined in claim 1), individual isomers thereof or racemic or non-racemic mixtures of isomers thereof, or pharmaceutically acceptable salts and hydrates thereof.

6. The pyrrolotriazine derivative substituted with a carbamoyl group according to claim 5 represented by the formula [III], wherein R¹ is -OR⁴ or -NR⁴R⁵; R² is C₁₋₆alkyl; R³ is hydrogen or C₁₋₆alkyl; R⁴ and R⁵ are the same or different, and independently hydrogen, C₁₋₉alkyl, C₃₋₇cycloalkyl, C₃₋₇cycloalkyl-C₁₋₆alkyl, di(C₃. rcycloalkyl)-C₁₋₆alkyl, C₁₋₆alkoxy-C₁₋₆alkyl, di(C₁₋₆alkoxy)-C₁₋₆alkyl, hydroxy-C₁₋₆alkyl or cyano-C₁₋₆alkyl; Ar is phenyl which phenyl is substituted with two or three substituents, which are the same or different, selected from the group consisting of halogen, C₁₋₃alkyl, C₁₋₃alkoxy, C₁₋₃alkylthio, trifluoromethyl, trifluoromethoxy and -N(R²⁰)R²¹ (wherein R²⁰ and R²¹ are the same or different, and independently are hydrogen or C₁₋₃alkyl), individual isomers thereof or racemic or non-racemic mixtures of isomers thereof, or pharmaceutically acceptable salts and hydrates thereof.

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- 7. The pyrrolotriazine derivative substituted with a carbamoyl group according to claim 5 represented by the formula [III], wherein R¹ is -OR⁴ or -NR⁴R⁵; R² is C₁₋₆alkyl; R³ is hydrogen or C₁₋₆alkyl; R⁴ is C₁₋₉alkyl, C₃₋₇cycloalkyl, C₃₋₇cycloalkyl, C₃₋₇cycloalkyl, C₁₋₆alkyl, di(C₁₋₆alkyl, di(C₁₋₆alkyl, hydroxy-C₁₋₆alkyl) or cyano-C₁₋₆alkyl; R⁵ is hydrogen; Ar is phenyl which phenyl is substituted with two or three substituents, which are the same or different, selected from the group consisting of halogen and C₁₋₃alkyl, individual isomers thereof or racemic or non-racemic mixtures of isomers thereof, or pharmaceutically acceptable salts and hydrates thereof.
- 8. An antagonist for CRF receptors, comprising a pyrrolopyrimidine or pyrrolotriazine derivative substituted with a carbamoyl group, a pharmaceutically acceptable salt thereof or its hydrate according to any one of claims 1 to 7, as an active ingredient.
- 9. Use of a pyrrolopyrimidine or pyrrolotriazine derivative substituted with a carbamoyl group, a pharmaceutically acceptable salt thereof or its hydrate according to any one of claim 1 to 7, for the manufacture of a therapeutic agent as an antagonist for CRF receptors.